217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

Gunite Corporation
Attn: Mark Morgan
302 Peoples Avenue
Rockford, Illinois 61104-7092

Application No.: 96030131 I.D. No.: 201030ABZ
Applicant's Designation: Date Received: March 7, 1996
Operation of: Gray and Ductile Iron Foundry
Date Issued: November 25, 2003 Expiration Date[2]: November 25, 2008
Source Location: 302 Peoples Avenue, Rockford, Winnebago County
Responsible Official: James D. Cirar, President and CEO

This permit is hereby granted to the above-designated Permittee to OPERATE a gray and ductile iron foundry, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Jonathan Sperry at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JS:psj

cc: Illinois EPA, FOS, Region 2

1 This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 – federal PSD and 35 IAC Part 203 – Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

2 Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Gunite Corporation
302 Peoples Avenue
Rockford, Illinois 61104-7092
815/964-3301

I.D. No.: 201030ABZ
Standard Industrial Classification: 3321, Gray Iron Foundries

1.2 Owner/Parent Company

Gunite Corporation
302 Peoples Avenue
Rockford, Illinois 61104-7092

1.3 Operator

Gunite Corporation
302 Peoples Avenue
Rockford, Illinois 61104-7092

Mark D. Morgan, Manager of Facilities Engineering
815/964-3301

1.4 General Source Description

Gunite Corporation is located at 302 Peoples Avenue in Rockford, Illinois. The source is a secondary metal casting facility that produces iron castings. The source consists of the following major production areas: Melt Department, Sand Department, and Finishing Department.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AIRS	Aerometric Information Retrieval System Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants (EPA-450/4-90-003), USEPA, Technical Support Division Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
Btu	British thermal unit
°C	degrees Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
°F	degrees Fahrenheit
FIRE	Factor Information Retrieval System, Versions 5.0 and 6.21, Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants (EPA-454/R-95-012 and EPA-454/F-99-003), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
FR	Federal Register
ft^2	square foot
ft^3	cubic foot
gal	gallon
g	gram
HAP	Hazardous Air Pollutant
hp	horsepower
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
in	inch
°K	degrees Kelvin
kg	kilogram
kW	kilowatts
lb	pound
m	meter
MACT	Maximum Available Control Technology
Mg	megagram
mmBtu	Million British thermal units
mmcf	million cubic feet
mmHg	millimeters of mercury
mo	month
MW	megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants

NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
OM	Organic Material
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
psia	pounds per square inch absolute
RMP	Risk Management Plan
scf	standard cubic foot
SO_2	Sulfur Dioxide
T1	Title I – identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
wt.	weight
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

40 Heaters Used for Comfort Purposes
Sand Storage (FE-NS1)

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

10 Ladle Preheaters

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit’s process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 212.321 and 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690, unless no odor nuisance exists.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Boiler #1	42 mmBtu/hr gas fired boiler	1/1977	None
Boiler #2	42 mmBtu/hr gas fired boiler	1/1977	None
Iron Melt Department			
FE-CH1	Iron Charge Handling	1/1976	Bag House BH-7
FE-CUP1,2	Cupolas #1 and #2 (Maximum Coke Firing 134 mmBtu/hr each)	1/1976	Afterburner AB-1 and Venturi Scrubber VS-1
FE-EHF1,2	Electric Holding Furnaces	1/1977	Bag House BH-7
FE-TS1	Iron Cupola Tapping/Slagging	1/1975	Bag House BH-7
FE-MI	Iron MGO Inoculation	1/1976	Bag House BH-7
FE-P1	Iron Casting Pouring	1/1976	None
FE-C1	Iron Casting Cooling	1/1975	None
Iron Sand Department			
FE-SO1	Iron Primary shakeout	1/1977	Bag Houses BH-9 and BH-10
FE-SO2	Iron Secondary Shakeout	1/1977	Bag Houses BH-7 and BH-10
FE-SC1	Sand Conveying	1/1977	Bag House BH-10
FE-SS1	Sand Screening	1/1977	Bag House BH-10
FE-SFBC1	Fluidized Bed Sand Cooler	1/1978	Bag House BH-8
FE-SM1	Sand Mullers	1/1977	Bag House BH-10
FE-NSS1	New Sand Storage	1/1977	Bin Vent
FE-SH1, 2	Sand Hoppers	1/1977	None
FE-ML1	Iron Molding Line	1/1977	Bag House BH-10
FE-LPC1	Iron Low Phenolic No-Bake Coremaking	1/1977	None
Iron Finishing Department			
FE-CC1	Iron Casting Conveyor	1/1977	Bag Houses BH-6, BH-9, and BH-10
FE-SB1	Iron Castings Shotblast 1	1/1977	Bag House BH-9
FE-SB2	Iron Castings Shotblast 2	1/1977	Bag House BH-9
FE-SB3	Iron Castings Shotblast 3	8/1996	Bag House BH-9
FE-TG1	OD Table Grinder	1/1977	Bag House BH-6
FE-TG2	ID Table Grinder	1/1977	Bag House BH-6
FE-PB1	Iron Paint Booth 1	1/1977	Paint Filter PF-1
FE-PB2	Iron Paint Booth 2	1/1977	Paint Filter PF-2

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of PM_{10}, CO, and VOM emissions.

5.1.2 This permit is issued based on the source not being a major source of HAPs.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

c. No person shall cause or allow the open burning of trade waste or refuse, except as provided in 35 IAC 237.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	258.03
Sulfur Dioxide (SO_2)	97.92
Particulate Matter (PM)	481.56
Nitrogen Oxides (NO_x)	54.33
HAP, not included in VOM or PM	---
Total	891.84

5.5.2 Emissions of Hazardous Air Pollutants

The emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. Compliance with these limits shall be based on a running total of 12 months of data, with emissions calculated using standard USEPA methodology, e.g., by appropriately summing the emissions of each individual HAP.

This condition is being imposed at the request of the Permittee so that the source is not a major source of HAP emissions and the requirements of 40 CFR Part 63, Subpart MMMM, DDDDD, and EEEEE, National Emission Standards for and Metal Parts Surface Coating, Industrial Boilers, and Iron Foundries, do not apply to the source.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for VOM and HAP Emissions

The Permittee shall maintain records of the following items for the source to verify that the source is not a major source of HAP emissions and therefore not subject to 40 CFR Part 63, and to quantify annual VOM and HAP emissions, so as to demonstrate compliance with the annual emission limits in Condition 5.5:

a. Aggregate monthly VOM emissions from emission units included in Section 7 of this permit; and

b. Aggregate monthly HAP emissions from emission units included in Sections 3 and 7 of this permit, calculated as a fraction of VOM emissions according to vapor weight percent.

5.6.3 Records for Operating Scenarios

N/A

5.6.4 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and

shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source, including the following information, so as to demonstrate whether the source is being operated as a non-major source of HAP emissions. This report shall be submitted with the Annual Emissions Report (Condition 9.7).

a. The annual emissions of individual HAPs for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year, (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all); and

b. The total annual emissions of all HAPs combined for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year, (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all).

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

a. For the purpose of estimating NO_x, SO_2, PM, and VOM emissions from natural gas combustion, the emission factors found in the current version of AP-42, Section 1.4, are acceptable.

b. For the purpose of estimating NO_x, SO_2, PM, and VOM emissions from iron foundry operations, the emission factors found in the following documents are acceptable:

i. Current version of AP-42, Section 12.10;

ii. AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, March, 1990;

iii. FIRE Version 5.0, Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, August, 1995 and any updates thereto; and

iv. Other research on estimating emissions from foundry operations, provided the Illinois EPA receives a summary of the research findings and agrees on its acceptability prior to use.

c. For the purpose of estimating fugitive PM emissions from unpaved roads and storage piles at the source, the emission factors and calculation procedures found in the current version of AP-42, Section 13.2, are acceptable.

d. For the purpose of estimating HAP emissions from equipment at the source, the vapor weight percent of each HAP for each organic liquid times the VOM emissions contributed by that organic liquid is acceptable.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit: Iron Foundry Process Equipment
Control: Dust Collectors, Scrubber, Afterburner

7.1.1 Description

In addition to producing standard cast iron, Gunite produces a ductile iron alloy. Gunite produces iron castings by melting scrap iron in cupola furnaces and pouring the molten metal into molds. Gunite reprocesses molding sand into new molds and produces some castings cores on site. Described below are the various departments of the Gunite iron foundry.

Melt Department

Scrap iron and coke is transported from storage (FE-SMS1) to one of two cupolas (FE-CUP1, FE-CUP2) via crane and skip hoist. Fugitive PM is emitted by the physical handling of the scrap iron and coke during transport (FE-CH1) and controlled by baghouse BH-7. Since the combustion of coke provides the required heat for iron melting, cupola effluent contains combustion products and metal particulates. Consequently, the cupola effluent gasses are routed through an afterburner (AB-1) to control CO and VOM emissions and a Venturi scrubber (VS-1) to control PM emissions. The two cupolas at the Gunite iron foundry are operated in parallel so that only one operates at a time.

During this continuous melt process, molten metal is routed through launders to electric holding furnaces (FE-EH1, FE-EHR2), which maintain melt temperature prior to transfer to ladles. Gas-fired ladle preheaters (FE-LPH1) are used to dry new and/or repaired refractory linings in the ladles. Using tundish covered ladles, magnesium wire is added at most 2 days per week to obtain a ductile iron alloy. The addition of magnesium wire to the molten metal generates PM emissions (FE-MI) which are controlled by BH-7. Once the desired composition is obtained, the metal is transferred to pouring ladles and subsequently into the molds.

Pouring Department

Molten metal is poured into casting molds directly from the ladles (FE-P1). As the molten metal contacts the molds, a portion of the organic material in the molds are volatilized and released into the atmosphere. Casting voids within the molds are made by resin-containing cores which also evolve organics upon metal contact. VOM and PM are also emitted from the molds during the metal cooling (FE-C1). After hardening, the entire mold is transported

by conveyor, punched out and conveyed through (primary shakeout) which separates the mold cores, and castings (FE-SO1). Dust emissions are collected and routed through bag houses (BH-9 and BH-10) for particulate control. Upon impact, the mold disintegrates, allowed the "green sand" to be collected and returned for reprocessing. The iron casting is conveyed through a secondary shakeout (FE-SO2) to remove additional sand and onto cooling conveyor and to the finishing department.

Sand System

PM emissions from the sand system are generated by the mechanical handling of sand. Emissions are exhausted to a bag house (BH-10). The collected sand from the casting shakeouts is conveyed to sand screening (FE-SS1) to remove any clumps. To re-condition and cool the sand, an aerator with water spray is applied followed by cooling in a fluidized bed cooler (FE-SFBC1). The fluidized bed cooler blows air into contact with the sand for further cooling and drying. Airborne particulates generated from the blow drying operation of FE-SFBC1, are controlled by a bag house (BH-8). New sand is supplied from the new sand storage silo (FE-NSS1) and mixed with recycled green sand in the muller (FE-SM1). A dust arrestor controls PM emissions from the sand handling operations of FE-NSS1 and PM emissions from FE-SM1 are controlled by a bag house (BH-10). Sand from the muller is transported into the sand storage hoppers (FE-SH1 and 2) for introduction to the flasks on the molding line (FE-ML1) where molds are completed. The particulates emitted from the molding line are controlled by a bag house (BH-10). The molds are then ready to be conveyed to the pouring department.

Coremaking Department

Cores utilized in the facility, are either produced in a low-phenolic no-bake resin coremaking unit (FE-LPC1) or purchased isocure cores. Insignificant emissions are associated with the storage of the purchased isocure cores. Emissions from the FE-LPC1 unit are not controlled and are released to the atmosphere. The completed cores are then conveyed to the molding line prior to use in the pouring department. Patterns stored used to form profile or cavity in green sand mold to create casting shape.

Finishing Department

Ductile iron castings are transported from shakeout by conveyor to the gate/riser removal (FE-GR1). The vibratory conveyor (FE-CC1) causes some material to be emitted from the castings in transport and is controlled by bag house (BH-6, BH-9, and BH-10) for particulates. At the knockout station, metal gates and risers are punched

out on hydraulic press and sent back to the melt department for reuse. Due to the method of gate/riser removal, it is assumed that no emissions are generated in the process.

From knockout presses, the castings are routed to iron shotblasters (FE-SB1, FE-SB2, and FE-SB3) where they are blasted with abrasive media to clean the casting. The shotblasters generate airborne particulates that are controlled by a bag house (BH-9).

7.1.2 List of Emission Units and Pollution Control Equipment

Plant Designation	Description	Emission Control Equipment
FE-CH1	Iron Charge Handling	Bag House BH-7
FE-CUP1, 2	Cupolas #1 and #2 (Maximum Coke Firing 134 mmBtu/hr each)	Afterburner AB-1 and Venturi Scrubber VS-1
FE-EHF1, 2	Electric Holding Furnaces	Bag House BH-7
FE-TS1	Iron Cupola Tapping/Slagging	Bag House BH-7
FE-MI	Iron MGO Inoculation	Bag House BH-7
FE-P1	Iron Casting Pouring	None
FE-C1	Iron Casting Cooling	None
FE-SO1	Iron Primary Shakeout	Bag Houses BH-9 and BH-10
FE-SO2	Iron Secondary Shakeout	Bag Houses BH-7 and BH-10
FE-SC1	Sand Conveying	Bag House BH-10
FE-SS1	Sand Screening	Bag House BH-10
FE-SFBC1	Fluidized Bed Sand Cooler	Bag House BH-8
FE-SM1,2	Sand Muller	Bag House BH-10
FE-NSS1	New Sand Storage	Bin Vent
FE-SH1, 2	Sand Hoppers	None
FE-ML1	Iron Molding Line	Bag House BH-10
FE-LPC1	Iron Low Phenolic No-Bake Coremaking	None
FE-CC1	Iron Casting Conveyor	Bag Houses BH-6, BH-9, and BH-10
FE-SB1	Iron Castings Shotblast 1	Bag House BH-9
FE-SB2	Iron Castings Shotblast 2	Bag House BH-9
FE-SB3	Iron Castings Shotblast 3	Bag House BH-9
FE-TG1	OD Table Grinder	Bag House BH-6
FE-TG2	ID Table Grinder	Bag House BH-6

7.1.3 Applicability Provisions and Applicable Regulations

a. The “affected foundry equipment” for the purpose of these unit-specific conditions is each piece of equipment as described in conditions 7.1.1 and 7.1.2 unless otherwise stated in the following conditions as unit specific.

b. The affected foundry equipment is subject to 35 IAC 212.123 which provides that:

   i. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to Section 212.122 of this Subpart [35 IAC 212.123(a)].

   ii. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period [35 IAC 212.123(b)].

c. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source [35 IAC 212.301].

d. Except for shot blasting and grinding operations, the affected foundry equipment is subject to 35 IAC 212.321(b), which provides that:

   No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

e. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm. This limit shall not apply to processes designed to remove sulfur compounds from the flue gases of fuel combustion emission sources. [35 IAC 214.301 and 214.302]

f. The affected foundry equipment is subject to 35 IAC 215 Subpart K, Use of Organic Material, which provides that:

i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in Condition 7.1.3(f)(ii) (see also 35 IAC 215.302) and the following exception: If no odor nuisance exists the limitation of this condition shall apply only to photochemically reactive material [35 IAC 215.301].

ii. Emissions of organic material in excess of those permitted by Condition 7.1.3(f)(i) (see also 35 IAC 215.301) are allowable if such emissions are controlled by flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water [35 IAC 215.302(a)].

g. The affected foundry equipment is subject to the emission limits identified in Condition 5.2.2.

h. Malfunction and Breakdown Provisions

In the event of a malfunction or breakdown of a venturi scrubber or afterburner (including primary and/or secondary exhaust or blower systems), the Permittee is authorized to continue operation of the cupolas (FE-CUP1 or FE-CUP2) in violation of the applicable requirement of 35 IAC 212.123, 212.321, or 215.301, as necessary to prevent risk of injury to personnel or severe damage to equipment. This authorization is subject to the following requirements:

i. The Permittee shall repair the damaged feature(s) of the air pollution control device, exhaust system, or blower system, or remove the cupola(s) from service as soon as practicable. This shall be accomplished within 4 hours.

ii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.1.9(a) and 7.1.10(a).

7.1.4 Non-Applicability of Regulations of Concern

a. The fuel burning portion of the affected foundry equipment is not subject to 35 IAC Part 217, Subparts B and C, Nitrogen Oxide Emissions from New and Existing Fuel Combustion Emission Sources, because none of the affected foundry equipment is by definition a fuel combustion emission unit.

b. The fuel burning portions of the affected foundry equipment is not subject to 35 IAC Part 216, Subpart B, Carbon Monoxide Emissions from Fuel Combustion Emission Units, because none of the affected foundry equipment is by definition a fuel combustion emission unit.

c. Each affected foundry equipment is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

d. This permit is issued based on the shot blasting and grinding operations not being subject to 35 IAC 212, Subpart L, Particulate Matter Emissions from Process Emission Units, pursuant to 35 IAC 212.681, which excludes shot blasting and grinding operations from this requirement.

e. The affected foundry equipment is not subject to 40 CFR 60 Subpart AAa, since the affected foundry equipment is neither an electric arc furnace nor Oxygen-Argon Decarburization Vessel.

7.1.5 Operational and Production Limits and Work Practices

a. The Permittee shall operate, maintain, and repair emission units in the foundry, including their associated control systems in a manner to minimize emissions and reasonably assure compliance with applicable emission standards by implementing the following procedures.

i. Operating Procedures: Written operating procedures shall be developed and maintained describing normal air pollution control equipment operation. Such procedures shall include maintenance practices and may incorporate the manufacturers recommended operating instructions.

ii. Repairs: Prompt repairs shall be made upon identification of need either as a consequence of formal inspections or other observations in conformance with good air pollution control practice. Maintenance and repair shall be coordinated with scheduled outages of units.

b. Operation of the ductile alloy operation shall not exceed 26.6 tons/hour and 2,500 hours per year. These limitations were established in Permit 91050056.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected foundry equipment is subject to the following:

a. Emissions from the affected foundry equipment shall not exceed the following limits:

	PM Emissions	
Item of Equipment	(Lb/Hr)	(Ton/Year)
Ductile Alloy Operation	14.65	18.31

These limits are based on the operational limits in Conditions 7.1.3 and 7.1.5. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 91050056, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

b. Emissions from the affected foundry equipment shall not exceed the following limits:

	PM Emissions	
Item of Equipment	(Lb/Hr)	(Ton/Year)
Dust Collector BH-9	17.14	43.19

These limits are based on a standard emission rate of 0.02 grains per day standard cubic foot and a maximum operating rate of 100,000 cubic feet per minute. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

The above limitations contain revisions to previously issued Permit 98080040. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the

conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the PM emission limits were changed from 0.71 lb/hour and 3.07 tons/year to 17.14 lb/hour and 43.19 tons/year. The original permitted emission limits related to the December 1998 replacement of two less efficient wet scrubbers (WS-1 and WS-6) with a high efficiency dust collector (BH-9). These original limits did not reflect actual operation of the affected foundry equipment. The new annual emission limit represents a net increase of less than 25 tons per year over actual emissions from the control devices which were replaced by Dust Collector BH-9. [T1R]

7.1.7 Testing Requirements

None

7.1.8 Monitoring Requirements

To assure compliance with the applicable requirements of this permit, the Permittee shall monitor the following, pursuant to Section 39.5(7)(b) and (d) of the Act:

a. The Permittee shall monitor the differential pressure across the air pollution control equipment controlling PM emissions from the affected foundry equipment.

b. Visual inspections of air pollution control equipment shall be conducted on at least a weekly basis.

c. The Permittee shall conduct a qualitative visible emissions observation of the affected foundry equipment once each day when operating to observe for the presence of abnormal visible emissions from air pollution control equipment controlling PM emissions. If such observations during operation do not detect observable emissions from affected process emission sources, for a period of two weeks, the frequency of observations shall be reduced to once per week when

operating. If the weekly observations do not detect observable emissions for a period of two months, the frequency of observations shall be reduced to once per month when operating. If abnormal visible emissions are detected the frequency of observations shall be increased to once a day. Observations thereafter may be reduced again if no visible emissions are detected for the period outlined above. If abnormal visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected foundry equipment to demonstrate compliance with emission limits of the Conditions 5.5.1 and 7.1.3 through 7.1.8, pursuant to Section 39.5(7)(b) of the Act.

a. Records for Malfunctions and Breakdowns of Cupolas

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an cupola subject to 35 IAC 212.123, 212.321, and 215.301 during malfunctions and breakdown of the control features of the venturi scrubber or afterburner (including primary and/or secondary exhaust or blower systems), which as a minimum, shall include:

i. Date and duration of malfunction or breakdown;

ii. A full and detailed explanation of the malfunction or breakdown;

iii. An explanation why the damaged feature(s) could not be immediately repaired or the cupola could not be removed from service without risk of injury to personnel or severe damage to equipment;

iv. The measures used to reduce the quantity of emissions and the duration of the event;

v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity; and

vi. The amount of release above allowable emissions during malfunction/breakdown.

b. Material throughput (tons/month and tons/year);

c. Emissions of PM, SO_2, NO_x, and VOM (lb/hour, tons/month and tons/year); and

d. Records of inspection, maintenance, repair, and monitoring activities for all equipment shall be kept on site and shall include as a minimum:

i. Date of inspection, maintenance, and repair activities.

ii. Description of maintenance or repair activity if not routine preventative maintenance.

iii. Probable cause for requiring maintenance or repair if not routine or preventative.

iv. A weekly log of monitoring required by Condition 7.1.8(a), including deviations from normal pressure drops across the PM emission control devices.

v. A log of qualitative visible emissions observations required by Condition 7.1.8(c).

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected furnace with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. Reporting of Malfunctions and Breakdowns for the Cupolas:

The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of a cupola subject to Condition 7.1.3(h) during malfunction or breakdown of the control features of the venturi scrubber or afterburner (including primary and/or secondary exhaust or blower systems).

i. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown.

ii. Upon achievement of compliance, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the cupola was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the cupola was taken out of service.

iii. If compliance is not achieved within 5 working days of the occurrence, the Permittee shall submit interim status reports to the Illinois EPA, Compliance Section and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the cupola will be taken out of service.

b. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

a. Compliance with the opacity and PM limitations of Conditions 5.2.2(b), 7.1.3(b), and 7.1.3(c) may be determined by the observations and recordkeeping requirements in Conditions 7.1.8 and 7.1.9.

b. Compliance with the requirements of Conditions 7.1.3 and the operational limits in Condition 7.1.5 is addressed by the monitoring and recordkeeping required by Conditions 7.1.8 and 7.1.9.

c. Compliance with the emission limits in Conditions 5.5.1 and 7.1.6 for the affected foundry equipment shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

Emission	Emission Factor (lb/ton)[A]				Emission Factor
Unit ID	PM	VOM	NO_x	SO_2	Source (FIRE)
FE-CH1	0.6	-	-	-	3-04-003-15
FE-CUP1, 2	13.11[B,C]	0.18[B]	0.10[B]	1.25[B]	3-04-003-01
FE-EHF1, 2	0.9[A]	-	-	-	3-04-003-03
FE-TS1	0.69[C]	-	-	-	3-04-003-01
FE-MI	4.0	0.005	-	-	3-04-003-10
FE-P1	0.26[F]	0.14	0.01	0.02	3-04-003-20
FE-C1	1.4	0.118	-	-	3-04-003-25
FE-SO1	2.56[D]	0.96[E]	-	-	3-04-003-31
FE-SO2	0.64[D]	0.24[D]	-	-	3-04-003-31
FE-SC1	3.6	-	-	-	3-04-003-50
FE-SS1	3.6	-	-	-	3-04-003-50
FE-FBC1	3.6	-	-	-	3-04-003-50
FE-SM1	3.6	-	-	-	3-04-003-50
FE-NSS1	3.6	-	-	-	3-04-003-50
FE-SH1, 2	3.6	-	-	-	3-04-003-50
FE-ML1	3.6	0.77[E]	-	-	3-04-003-50
FE-LPC1	3.6	0.77[E]	-	-	3-04-003-50
FE-CC1	0.032[D]	0.012[D]	-	-	3-04-003-31
FE-SB1	17.0	-	-	-	3-04-003-40
FE-SB2	17.0	-	-	-	3-04-003-40
FE-SB3	17.0	-	-	-	3-04-003-40
FE-TG1	17.0	-	-	-	3-04-003-40
FE-TG2	17.0	-	-	-	3-04-003-40

[A] Emission factor basis is amount of material (e.g., metal, sand, castings) charged or processed, unless otherwise noted. The emission factor for an Electric Holding Furnace is in units of lb/ton gray iron produced.

[B] Cupola emission factors include emissions from coke combustion.

[C] Cupola PM emission factor listed in FIRE, 3-04-003-01, is split between Cupola (95%) and Cupola Tapping/Slagging (5%).

[D] Casting shakeout PM and VOM emission factors listed in FIRE, 3-04-003-31, are split between Primary Shakeout (80%) and Secondary Shakeout (20%).

[E] These VOM emission factors are based on material balance.

[F] PM emission factor is based on site specific test data.

Emissions (lb) = Emissions Factor (lb/ton) x Material Charged/Processed/Produced (ton) x $[1-\eta_{Capture} \times \eta_{Control}]$

Where:

$\eta_{Capture}$ = Capture Efficiency/100%

$\eta_{Control}$ = Control Efficiency/100%

(Efficiency as determined by manufacturers or vendors of the control devices or the most recent emissions tests)

7.2 Unit: Paint Booths
Control: Filters

7.2.1 Description

After shotblast cleaning, the castings are painted black in the cast iron paint booth (FE-PB1) or the ductile iron paint booth (FE-PB2) prior to shipment. All coatings are air-dried. VOM emissions occur from these operations due to evaporation of the organic material in the coatings during the coating and drying processes. In addition, airborne paint particulates are controlled by a paint filter.

7.2.2 List of Emission Units and Pollution Control Equipment

Plant Designation	Description	Emission Control Equipment
FE-PB1	Iron Paint Booth 1	Paint Filter PF-1
FE-PB2	Iron Paint Booth 2	Paint Filter PF-2

7.2.3 Applicability Provisions and Applicable Regulations

a. An "affected paint booth" for the purpose of these unit-specific conditions are the coating operations described in conditions 7.2.1 and 7.2.2.

b. The affected paint booths are subject to 35 IAC 212, Subpart L: Particulate Matter from Process Emission Sources, which provides that:

> No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

c. The affected paint booths are subject to 35 IAC 215.204(j) for miscellaneous metal parts and products coating, which provides that:

> No owner or operator of a coating line shall cause or allow the emission of VOM to exceed the following emission limitations for the coating as applied to miscellaneous metal parts and products. The following emission limitations are expressed in units of VOM per volume of coating (excluding water and any compounds which are specifically exempted from the definition of VOM) as delivered to the coating applicator:

Application	(kg/liter)	(lb/gal)
Clear Coating	0.52	4.3
Air Dried Coating	0.42	3.5
Extreme Performance	0.42	3.5

d. The affected paint booths are subject to the NESHAP for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR Part 63 Subparts A and MMMM, because the source uses more than 946 liters (250 gallons) per year of coating in the miscellaneous metal parts and products source category and is located at a plant site that is a major source as defined in 40 CFR 63.2. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. The affected paint booths shall comply with all applicable requirements for existing equipment in 40 CFR 63, Subpart MMMM. Compliance is required three years after the effective date of the final rule. (Note that Section 7.2 of this permit contains requirements from Subpart MMMM as contained in the proposed rule, dated August 13, 2002. If the final rule is different from the proposed rule, then the Permittee shall comply with the final rule.)

On and after the compliance date in 40 CFR 63.3883, each owner or operator of an existing affected source subject to 40 CFR 63 Subpart MMMM shall follow the requirements of sections (i) through (iii) below:

i. Limit organic HAP emissions to the atmosphere from the affected paint booths to the limit specified by the following equation during each 12-month compliance period [40 CFR 63.3890(b)(1), proposed at 67 FR 52799]:

$$\text{HAP Limit} = \frac{0.31(GU) + 3.30(HP)}{(GU + HP)}$$

Where

HAP Limit = Total allowable organic HAP that can be emitted to the atmosphere from the miscellaneous metal parts and products surface coating operation, in kg organic HAP per liter of coating solids used;

GU = Volume of general use coating solids used, liters; and

HP = Volume of high performance coating solids used, liters.

ii. Demonstrate that the organic HAP content of each coating used in the coating operation is less than or equal to the emission limit above, and that each thinner and each cleaning material used contains no organic HAP. Meet all the requirements of 40 CFR 63.3940, 63.3941, and 63.3942 to demonstrate compliance using this option [40 CFR 63.3891(a), proposed at 67 FR 52799]; or

iii. Demonstrate that, based on the coatings, thinners, and cleaning materials used in the coating operations, the organic HAP emission rate for the coating operations is less than or equal to the emission limit above, calculated as a rolling 12-month emission rate and determined on a monthly basis. Meet all the requirements of 40 CFR 63.3950, 663.3951, and 63.3952 to demonstrate compliance using this option [40 CFR 63.3891(b), proposed at 67 FR 52799].

7.2.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected paint booths not being subject to 35 IAC 215.301, Use of Organic Material, pursuant to 35 IAC 215.209, which excludes coating lines from this requirement.

b. This permit is issued based on the affected paint booths not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected paint booths do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.5 Operational and Production Limits and Work Practices

a. Operation of the affected paint booths shall not exceed the following limits:

VOM Usage	
(Ton/Mo)	(Ton/Yr)
6.72	53.72

The above limitations contain revisions to previously issued Permit 91050056. Specifically, the operating limits were changed from a paint volume basis to a VOM usage basis to facilitate the use of coatings with a lower VOM content. [T1R]

b. The Permittee shall at all times, to the extent practicable, maintain and operate the affected paint booths, including the associated filter equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

c. An adequate inventory of spare filters shall be maintained.

d. On and after the compliance date in 40 CFR 63.3883, the Permittee shall follow the applicable Work Practices for the affected paint booths as specified in 40 CFR 63.3893, proposed at 67 FR 52799.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected paint booths are subject to the following:

a. Emissions from the affected paint booths shall not exceed the following limits:

VOM Emissions	
(Ton/Mo)	(Ton/Year)
6.72	53.72

These limits are based on the operational limits in Conditions 7.1.3 and 7.1.5. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations contain revisions to previously issued Permit 91050056. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the individual emission limits for wheel painting and drum painting were combined and the short term emission limit was changed from an hourly to a monthly basis. [T1R]

7.2.7 Testing Requirements

a. Testing for VOM content of coatings and other materials shall be performed as follows [35 IAC 215.208(a) and Section 39.5(7)(b) of the Act]:

i. Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used in each affected paint booth shall be determined according to USEPA Reference Method 24 or 24A of 40 CFR 60, Appendix A.

ii. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records required by Condition 7.2.9 directly reflect the application of such material and separately account for any additions of solvent.

7.2.8 Monitoring Requirements

a. The Permittee shall visually inspect the filtering system and check for particulate build-up on a regular basis in order to ensure proper operation of the filters and the need for replacement.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected paint booths to demonstrate compliance with Conditions 5.5.1 and 7.2.3 through 7.2.8 pursuant to Section 39.5(7)(b) of the Act.

a. The Permittee shall collect and record the following operational information:

i. The name and identification number of each coating as applied on the affected paint booths;

ii. The usage of each coating, solvent, and any other material containing VOM used on the affected paint booths (gallon/year);

iii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each month on the affected paint booths;

iv. The VOM content (weight percent) and density (pound/gallon) of each coating, cleaning solvent, and any other material containing VOM;

v. The solids content of each coating used (volume percent);

b. The annual VOM and PM emissions of the affected paint booths, based on calculation procedures specified in Condition 7.2.12.

c. Results of filter inspections and dates of replacements made.

d. Records of the testing of VOM content of each coating and cleaning solvent as tested pursuant to the conditions of this section, which include the following [Section 39.5(7)(e) of the Act]:

i. Identification of materials used, results of analysis, documentation of analysis methodology, and person performing analysis; or

ii. Records from the supplier of the material, such as material safety data sheets, certified product data sheets, or environmental data sheets, which document such testing.

e. On and after the compliance date in 40 CFR 63.3883, the Permittee shall retain all applicable records for the affected paint booths as specified by 40 CFR 63.3930, proposed at 67 FR 52799.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected paint booth with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. If there is a deviation from the requirements of Condition 7.2.6 as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

b. Upon promulgation of 40 CFR 63, Subpart MMMM, the Permittee shall submit all applicable reports for the affected paint booths as specified in 40 CFR 63.3910 and 63.3920, proposed at 67 FR 52799.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected paint booths without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

a. Usage of coatings, thinners, cleaning solvents with various VOM contents provided that the materials are tested in accordance with the Condition 7.2.7 and do not exceed the VOM content limitations of Condition 7.2.3 or the source wide emission limitations of Condition 5.5.1.

7.2.12 Compliance Procedures

a. Compliance with the PM limitations in Condition 7.2.3 is assured and achieved by the proper operation and maintenance of the filtering systems, as required by Conditions 7.2.5 and 7.2.8, and the work practices inherent in the operation of the affected paint booths.

b. Compliance of each coating with the VOM emission limitations in Condition 7.2.3 shall be based on the recordkeeping requirements in Condition 7.2.9 and by the use of either testing as required in Condition 7.2.7 or by use of the formulae listed below:

$$\text{Coating VOM Content} = V \times D/[1 - W \times D]$$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$$W = \Sigma\ (w_i/d_i)$$

Where:

w_i = Percent exempt compound i in the coating,

d_i = Overall density of exempt compound i, in lb/gal

and the summation Σ is applied over water and all exempt compounds i, in the coating.

c. To determine compliance with Condition 5.5.1, VOM and PM emissions from the affected paint booths shall be calculated based on the following equations:

i. Particulate Matter Emissions (Spray Application):

PM Emissions (lb) = (Coating Usage, gal) x (Coating Density, lb/gal) x (wt. % Solids) x [1 - (Transfer Efficiency[A] (%)/100)]

ii. Volatile Organic Material Emissions:

VOM Emissions (lb) = Coating Usage (gal) * Coating Density (lb/gal) * VOM Content[B] of Coating (wt. %) + Solvent/Thinner Usage (gal) * Solvent/Thinner Density (lb/gal) * VOM Content of Solvent/Thinner (wt. %).

[A] The repair coat has an overall transfer efficiency of 30 percent, all other coatings have an overall transfer efficiency of 65 percent.

[B] The Permittee may use the VOM content (minus water and any compounds which are specifically exempted from the definition of VOM) from MSDS if that specific coating material is applied as supplied. If the Permittee is preparing any batch of coating material to be applied, VOM content shall be determined by laboratory analysis and the records shall be kept indicating detailed procedure of the test performed, including the quality control data.

d. To determine compliance with Condition 7.2.3(d) (see also 40 CFR 63.3890), the Permittee shall follow the applicable compliance procedures for the affected paint booths specified in 40 CFR 63.3900 and 63.3940 through 63.3952, proposed at 67 FR 52799.

7.3 Unit: Gas Fired Boilers

7.3.1 Description

The boilers combust natural gas to produce steam for heating at the source.

7.3.2 List of emission equipment and pollution control equipment

Emission Unit	Description	Emission Control Equipment
Boiler #1	42 mmBtu/hr Gas Fired Boiler	None
Boiler #2	42 mmBtu/hr Gas Fired Boiler	None

7.3.3 Applicable Regulations

a. The "affected boilers" for the purpose of these unit specific conditions, are the fuel combustion emission unit described in Conditions 7.3.1 and 7.3.2.

b. Each affected boiler is subject to the opacity and emission limits identified in Condition 5.2.2.

c. Each affected boiler is subject to 35 IAC 216.121, which states that the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.3.4 Non-Applicability of Regulations of Concern

a. Each affected boiler is not subject to 35 IAC 217.141, because the actual heat input of each affected boiler is less than 73.2 MW (250 mmBtu/hr).

b. Pursuant to 35 IAC 215.303, each affected boiler, i.e., fuel combustion emission unit, is not subject to 35 IAC 215.301, Use of Organic Material.

c. Each affected boiler is not subject to the New Source Performance Standard 40 CFR 60 Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units, because each affected boiler was constructed prior to June 9, 1989, the applicability date of this regulation.

d. This permit is issued based on the affected boilers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.5 Operational and Production Limits and Work Practices

Each affected boiler shall only be fired with natural gas.

7.3.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5 (7) (b) of the Act:

a. Monthly and annual natural gas usage in the affected boilers (ft^3/month and ft^3/year);

b. Heat content of natural gas (Btu/ft^3); and

c. Annual aggregate NO_x, CO, PM, SO_2, and VOM emissions from each affected boiler, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected boiler with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. The Permittee shall notify the Illinois EPA within 60 days of operation of an affected boiler that may not have been in compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

a. Compliance with the CO emission limit in Condition 7.3.3(c) is demonstrated under inherent operating conditions of the affected boiler combusting only natural gas, so that no compliance procedures are set in this permit addressing this requirement.

b. Compliance with the emission limits in Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

i. Emissions from the affected boilers burning natural gas shall be calculated based on the following emission factors:

Pollutant	Emission Factor ($lb/10^6$ ft^3)
PM	7.6
SO_2	0.6
VOM	5.5
NO_x	100.0

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement F, March 1998.

Boiler Emissions (lb) = Natural gas consumed (ft^3) multiplied by the appropriate emission factor.

ii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.3.12(b)(i) for all affected boilers.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after June 12, 2003 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 – Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

10.1.1 Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A\ (P)^B$$

Where:

P = Process weight rate; and

E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/hr
A	11.42	24.8
B	0.16	0.16

c. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	ton/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.2	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

Where:

P = Process weight rate in Mg/hr or T/hr; and

E = Allowable emission rate in kg/hr or lbs/hr

10.2 Attachment 2 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.3 Attachment 3 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;

2. Minor Permit Modification; and

3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;

- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

    - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and

    - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.

- Are not modifications under any provision of Title I of the CAA;

- Are not required to be processed as a significant permit modification; and

- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- The source's suggested draft permit/conditions;

- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. <u>Significant Permit Modification</u>

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;

- Applications requesting a relaxation of reporting or recordkeeping requirements; and

- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or

- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or

- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.

Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	**For Illinois EPA use only**
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information

1. Source name:		
2. Source street address:		
3. City:		4. Zip code:
5. Is the source located within city limits?		☐ Yes ☐ No
6. Township name:	7. County:	8. I.D. number:

Owner Information

9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)

14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information

19. Who is the applicant? ☐ Owner ☐ Operator	20. All correspondence to: (check one) ☐ Owner ☐ Operator ☐ Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents

24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	☐ Yes ☐ No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	☐ Yes ☐ No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	☐ Yes ☐ No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes ☐ No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	☐ Yes ☐ No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	☐ Yes ☐ No ☐ Not Applicable, No TRADE SECRET information in this application

Note 1: Answering “No” to any of the above may result in the application being deemed incomplete.

Signature Block

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.

30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.

Authorized Signature:

BY:

_____ AUTHORIZED SIGNATURE

_____ TITLE OF SIGNATORY

_____ TYPED OR PRINTED NAME OF SIGNATORY

_____ / _____ / _____ DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source’s CAAPP permit, if necessary.

10.5 Attachment 5 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.

2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.

3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.

4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.

5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.

6. Information addressing any outstanding transfer agreement pursuant to the ERMS.

7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.

9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

JS:psj